THE BRITISH VETERINARY JOURNAL

VOLUME 134
1978

LONDON: BAILLIÈRE TINDALL

AUTHOR INDEX

ADAM, K. M. G., 428
Adegboye, D. S., 162, 556
Allen, W. E., 263
Alonao Fernández, A., 53
Anderson, J. C., 412
Aycardi, E. R., 101

BAILES, G., 214
Bailey, J., 225
Ball, H. J., 584
Balnave, D., 598
Beeck, A., 43
Bekkum, J. G. van, 68
Blewett, D. A., 428
Bohorquez, M., 101
Bradley, R., 229, 434
Bramley, A. J., 146
Brand, T. F., 92
Brown, D. D., 92
Brown, M. P., 366
Buntain, D., 299

CALLIS, J. J., 10
Capstick, P. B., 34
Casas Olascoaga, R., 16
Chiejina, S. N., 541
Christie, G., 358
Clegg, F. G., 541
Collins, T. J., 428
Corbel, M. J., 212
Cornwell, R. L., 166
Corrier, D. E., 101
Cortés, J. M., 101
Cullen, G. A., 198

DAWE, P. S., 249, 504
Dawkins, M., 469
Dennis, M. J., 561

EDGAR, J. T., 428
Ellis, P. R., 47
Ellis, R. N. W., 205, 322, 333
Ellis, W. A., 584
English, P. B., 445
Evans, D., 85
Evans, D. G., 476
Ezeh, A. O., 515

FERGUSON, H. W., 584
Fisher, E. W., 231, 234
Fishwick, G., 578

GHALIB, H. W., 375
Gibbs, E. P. J., 85
Gitter, M., 113
Goll, P. H., 551
Goyal, H. O., 366
Gray, J., 193
Greer, D. O., 572

HARBOURNE, J. F., 122, 350
Head, K. W., 454
Hebert, C. N., 181
Heckmann, R., 521
Henderson, W. M., 3
Holdsworth, R. J., 214
Hudd, D. L., 243
Humphreys, D. H., 128

JACKSON, D. W., 286
James, A. D., 47
Jeanguyot, N., 462
Jones, R. M., 166
Jones, R. S., 521

KEIGHLEY, S. G., 122
Kelley, W. R., 171
King, J. O. L., 393
Kolar, J., 384
Kumi-Diaka, J., 537

LAMBERT, M. B., 171
Lawman, M. J. P., 85
Lategan, P. M., 342
Lawrence, T. L. J., 205, 322, 333
Le Goupil, F., 462
Logan, E. F., 258, 590
Longland, J. M., 152
Lucry, K. W., 350

MACCALLUM, F. J., 366
McCrea, C. T., 454
McDiarmid, A., 85
McMurray, C. H., 258, 590
McParland, P. J., 258, 590
McRory, F. J., 258, 590
Mair, N. S., 122
Martinez, A. A., 231, 234
Masiga, W. N., 162
Michell, A. R., 217
Moberg, G. P., 501
Molokwu, E. C. I., 493
Mowat, G. N., 28
Mustafa, A. A., 375

NEAVE, R. M. S., 270
Neill, S. D., 584
Newman, A. J., 270
Nockels, C. F., 286
Nunes, P., 23

O'BRIEN, J. J., 584
O'Neill, D. G., 258, 590
Onoviran, O., 162
Osbaldiston, G. W., 524

PAMIGLIONE, G., 299
Patterson, D. S. P., 421
Pay, T. W. F., 76
Peaker, M., 308, 379
Pearce, J., 598
Pearson, J. K. L., 572
Penny, R. H. C., 193
Pepper, R. T., 113
Pereira, H. G., 58
Philpott, M., 162, 515
Pinto, A. A., 504
Pollock, D. A., 572
Potgieter, H. J., 342
Pott, J. M., 166
Prasad, L. B. M., 315
Pratt, J. H., 476
Preez, J. C. du, 342

REDWOOD, D. W., 212
Richards, R. A., 38
Richardson, C., 113, 181, 299
Roberts, B. A., 421
Robinson, D. W., 501
Rowe, L., 85
Rwyemamu, M. M., 63

SALAZAR, J. J., 101
Saumande, J., 462
Scott, J. M., 551
Shreeve, B. J., 421
Shigidi, M. T., 375
Smith, G. R., 407
Snell, G. C., 198
Swanson, V. B., 286
Swire, P. W., 398

TERLECKI, S., 299
Thibier, M., 462
Thomas, G. W., 350
Thomas, L. H., 152
Tomori, O., 108
Thornton, J. R., 283, 445

WAGHELA, S., 565
Wardley, R. C., 280
Webbon, P. M., 193
Wells, D. E., 225
Wells, E. A., 101
Wheelock, D. B., 561
Wilkinson, P. J., 280
Windsor, R. S., 162
Wood, P. D. P., 152
Wrathall, A. E., 225, 421
Wray, C., 113, 225
Wuersch, W., 521

YOKEL, J. W., 286
Young, G. B., 299

ZEMJANIS, R., 537
Ziv, G., 270

SUBJECT INDEX

Abortion in pigs, experimentally induced bacterial endotoxaemia and, 225
Actinobacillus suis, isolation from a colt, 122
Africa, foot and mouth disease control programmes in, 34
African swine fever virus in pig endothelial cells, the replication of, 280
America:
  Central and North, national and international foot and mouth disease control programmes, 10
  South, situation of the foot and mouth disease control programmes in, 16
  South, types and subtypes of foot and mouth disease virus currently found in, 53
Anaemia induced by the daily bleeding of ten-week-old cockerels, haematological and biochemical findings in an, 358
Antigenic variation in relation to epidemiology and control of foot and mouth disease, 58
Atrophic rhinitis: the value of radiography for diagnosis in piglets, 193

Babesiasis, outbreaks of on two farms in Scotland, 428
Bacterial endotoxaemia and abortion in pigs, experimentally induced, 225
Bank vole *Clethrionomys glariolus*, susceptibility of, to infection with *Campylobacter fetus*, 212
Battery cage, welfare and the structure of a: size and cage floor preferences in domestic hens, 469
Benefit-cost analysis in foot and mouth disease control programmes, 47
Biotin deficiency and the fatty liver and kidney syndrome in poultry, a review, 598
Blood clotting in immature sheep and cattle, factors affecting, 286
Blood components, sequential changes in some, in the normal neonatal calf, 590
Book reviews:
  Animal microbiology (A. Buxton & G. Fraser), 295
  Atlas of veterinary ophthalmic surgery (S. I. Bistner, G. Aguirre & G. Batik), 613
  Beltsville symposia in agricultural research I. Virology in agriculture, 513
  Black's veterinary dictionary, 289
  British pharmacopoeia (veterinary) (HMSO), 295
  Current veterinary therapy (R. W. Kirk), 191
  Dietary standards for laboratory animals (Laboratory Animals Centre), 83
  Digestion in the pig (D. E. Kidder & M. J. Manners), 613
  Horseshoeing theory and hoof care (Emery, Miller & van Hoosen), 192
  Introduction to animal physiology (P. Svendsen), 293
  Introduction to veterinary pharmacology, 289
  Metabolic diseases in farm animals (J. M. Payne), 612
  Outlines of avian anatomy (A. S. King & J. McLelland), 290
  Poultry diseases (R. F. Gordon), 610
  Poultry meat hygiene and inspection (A. S. Bremner), 291
  Principles of drug disposition in domestic animals; the basis of veterinary clinical pharmacology (J. D. Baggot), 293
  Review of bovine brucellosis – an international symposium (R. P. Crawford & R. J. Hidalgo), 513
  Sheep production (J. B. Owen), 517
  U.F.A.W. handbook on the care and management of laboratory animals, 83
  Veterinary annual (C. S. G. Grunsell & F. W. G. Hill), 611
  Veterinary applied pharmacology and therapeutics (G. C. Brander & D. M. Pugh), 294
  Veterinary laboratory manual (B. M. Bush), 83
  Veterinary neuroanatomy and clinical neurology (A. de Lahunta), 515
  Veterinary physiology (J. W. Phillips), 292
Botulism, Waterfowl and mud, 407
Brazil, national plan for the control of foot and mouth disease in, 23
Brucella melitensis, serological response of adult goats infected with live, 565
Brucella vaccine BP 19, some observations on antigenic properties and immunogenic effects of, 584

Calves:
  absorption of colostral immunoglobulins by the neonatal, 258
  body of water of; change in distribution with diarrhoea, 445
  chronic *Salmonella dublin* infection in, 113
  low level feed administration of morantel tartrate in the prophylaxis of experimental nematode infections in lambs and, 166
  modification of technique for deriving gnotobiotic, 561
  relationship between the zinc sulphate turbidity test, serum immune globulins and the susceptibility of, to diarrhoea, 231
  sequential changes in some blood components in the normal neonatal, 590
  some observations on the epidemiology of ostertagiasis in Britain; an analysis of laboratory diagnostic and field data for 1974 to 1976, 541
  studies in neonatal diarrhoea VII; the effect of milk intake, 234
Campylobacter fetus, susceptibility of the bank vole *Clethionomys glariolus* to infection with, 212
Cats, haematological values in healthy, 524
Cattle:
  antibody responses to type-specific and 'virus-infection-associated' antigens in cattle vaccinated with inactivated polyvalent foot and mouth disease virus in North Malawi, 504
  carrier rate of *Pasteurella multocida* in a herd associated with an outbreak of haemorrhagic septicaemia in the Sudan, 375
  critical analysis of condemnation data for pigs, sheep and, 1969 to 1975, 476
  effect of subclinical *Staphylococcus epidermidis* infection of the lactating bovine udder on its susceptibility to infection with *Streptococcus agalactia* or *Escherichia coli*, 146
  electrical conductivity of milk for the detection of subclinical mastitis in cows: comparison of various methods of handling conductivity data with the use of cell counts and bacteriological examination, 308
  experimental transmission by *Musca* and *Stomoxys* species of *D. congolensis* infection between, 515
  factors affecting blood clotting in immature sheep and, 286
  field trial in Nigeria with the comparative intradermal allergic test for the diagnosis of contagious bovine pleuropneumonia, 162
  hyena disease in: lutropin, oestradiol-17β, testosterone, progesterone and 17-hydroxyprogesterone peripheral plasma concentrations, 462
  influence of disease on the performance of beef, 152
  iodinated diaminodiphenylsulphone in the treatment of bovine mastitis during the non-lactating period, 270
  isolation of mycoplasma from bovine foetuses and their dams, 584
  seasonal changes in bovine and caprine blood chemistry and hepatic vitamin A in savanna zone of Nigeria, 493
  seasonal variations in spermatogenesis in bulls indigenous to Nigeria, 537
  skeletal muscle biopsy techniques in animals for histochemical and ultrastructural examination and especially for the diagnosis of myodegeneration in, 434
  survey of health problems in the Eastern Plains of Colombia, 101
Chickens:
  effects of maternal antibody on viraemic and antibody responses to cell-associated and cell-free turkey herpesvirus in, 315
  haematological and biochemical findings in an anaemia induced by the daily bleeding of ten-week-old cockerels, 358
  welfare and the structure of a battery cage: size and cage floor preferences in domestic hens, 469

Cocoa-bean meal, the use of in the diets of horses: pharmacology and pharmacokinetics of theobromine, 171
Colombia, a survey of cattle health problems in the Eastern Plains of, 101
Colostral immunoglobulins, absorption of by the neonatal calf, 258
Condemnation data for cattle, pigs and sheep 1969 to 1975, a critical analysis of, 476
Congenital disease of lambs clinically similar to 'inherited cerebellar cortical atrophy' (daft lamb disease), 299
Contagious bovine pleuropneumonia, a field trial in Nigeria with the comparative intradermal allergic test for the diagnosis of, 162

Deer, a preliminary survey of British, for antibody to some viral diseases of farm animals, 85
Dermatophilus congolensis infection between cattle, the experimental transmission by *Musca* and *Stomoxys* species of, 515
Diarrhoea:
  change in distribution of body water of calves with, 445
  relationship between the zinc sulphate turbidity test, serum immune globulins and the susceptibility of calves to, 231
  studies in neonatal calf VII; the effects of milk intake, 234
Dog, observations on the duration of action of suxamethonium in the, 521

Epiphyseal plate closure in the fore-limb and effects on body conformation; energy under-nutrition in the weanling filly foal II, 322
Escherichia coli, effect of subclinical *Staphylococcus epidermidis* infection of the lactating bovine udder on its susceptibility to infection with *Streptococcus agalactiae* or, 146
Ethiopian Central Highlands, the interrelationship of *Lymnaea truncatula* and ovine fascioliasis in the, 551
Europe, foot and mouth disease control programmes in, 28
Extracellular fluid volume (radiosulphate space) in horses, the measurement of, 283

Faeces, feeding dried rabbit, to growing rabbits, 393
Fascioliasis, ovine, in the Ethiopian Central Highlands, the interrelationship of *Lymnaea truncatula* and, 551
Food intake, subsequent voluntary, and effects on heart rate; energy under-nutrition in the weanling filly foal III, 333
Food products of animal origin, residue monitoring of, 243
Foot and mouth disease:
  antibody responses to type-specific and 'virus-infection-associated' antigens in cattle vaccinated with inactivated polyvalent virus in North Malawi, 504
  antigenic variation in relation to epidemiology and control of, 58
  benefit-cost analysis in control programmes, 47
  control programmes in Africa, 34
  control programmes in Europe and the Middle East, 28
  factors affecting the quality of vaccines, 68
  histological review of the control of, 3
  implications of trends in livestock production for the control of, 38
  international monetary aid, 43
  national and international control programmes in Panama, Central and North America, 10
  national plan for control in Brazil, 23
  review of quality control methods, 76
  seasonal, and its control in Malawi, 249
  selection of vaccine strains of virus, 63
  situation of control programmes in South America, 16
  types and subtypes of virus currently found in South America, 53
Fox (*Vulpes vulpes crucigera*), laboratory observations on the, in Dyfed during the winters of 1974/75 and 1975/76, 398

Gestation period and litter size in the goat, 379
Gnotobiotic calves, modification of a technique for deriving, 561
Goats:
  gestation period and litter size in the, 379
  seasonal changes in bovine and caprine blood chemistry and hepatic vitamin A in savanna zone of Nigeria, 493
  serological response to adult, infected with live *Brucella melitensis*, 565
Growth rates and patterns of organs and tissues in the ovine foetus, 181

Haemorrhagic septicaemia in the Sudan, carrier rate of *Pasteurella multocida* in a cattle herd associated with an outbreak of, 375
Heart rate and subsequent voluntary food intake, effects on; energy under-nutrition in the weanling filly foal III, 333
Herpesvirus, turkey, effect of maternal antibody on viraemic and antibody responses to cell-associated and cell-free, in chickens, 315
Horses:
  an assessment of ossification and radiological interpretation in limbs of growing, 366
  energy under-nutrition in the weanling filly foal I, effects on subsequent live-weight gains and onset of oestrus, 205
  energy under-nutrition in the weanling filly foal II, effects on body conformation and epiphyseal plate closure in the fore-limb, 322
  energy under-nutrition in the weanling filly foal III, effects on heart rate and subsequent voluntary food intake, 333
  isolation of *Actinobacillus suis* from a colt, 122
  measurement of extracellular fluid volume (radiosulphate space) in, 283
  progestagens in mares' milk, 214
  some observations on pseudopregnancy in mares, 263
  use of cocoa-bean meal in the diets of: pharmacology and pharmacokinetics of theobromine, 171
Hyena disease in cattle: lutropin, oestradiol-17β, testosterone progesterone and 17-hydroxyprogesterone peripheral plasma concentrations, 462
Hyperphagia, the feeding response to β adrenergic active agents during lactation-induced, 501

Immunosuppression, a review of mycoplasma-induced, 556
Iodinated diaminodiphenylsulphone in the treatment of bovine mastitis during the non-lactating period, 270

Lactation-induced hyperphagia, the feeding response to β adrenergic active agents during, 501
Litter size and gestation period in the goat, 379
Livestock production, implications of trends in, for the control of foot and mouth disease, 38
Live-weight gains and onset of oestrus, effects on subsequent; energy under-nutrition in the weanling filly foal I, 205
Lutropin, oestradiol-17β, testosterone, progesterone and 17-hydroxyprogesterone peripheral plasma concentrations; hyena disease in cattle, 462
Lymnaea truncatula, the interrelationship of, and ovine fascioliasis in the Ethiopian Central Highlands, 551

Malawi, North, antibody responses to type-specific and 'virus-infection-associated' antigens in cattle vaccinated with inactivated polyvalent foot and mouth disease virus, 504
Malawi, seasonal foot and mouth disease and its control in 249

Mastitis:
during the non-lactating period, iodinated diaminodiphenylsulphone in the treatment of bovine, 270
electrical conductivity of milk for the detection of subclinical, in cows: comparison of various methods of handling conductivity data with the use of cell counts and bacteriological examination, 308
preliminary findings on the characterization of bacteria causing, by gas chromatography, 342
staphylococcol, the problem of immunization against, 412
Middle East, foot and mouth disease control programmes in, 28
Milk, electrical conductivity of, for the detection of subclinical mastitis in cows: comparison of various methods of handling conductivity data with the use of cell counts and bacteriological examination, 308
Milk intake, the effect of; studies in neonatal calf diarrhoea VII, 234
Milk, progestagens in mares', 214
Morantel tartrate, low level feed administration of, in the prophylaxis of experimental nematode infections in lambs and calves, 166
Mycoplasma-induced immunosuppression, a review of, 556
Mycoplasma, the isolation of, from bovine foetuses and their dams, 584
Mycoplasmosis in turkeys, an evaluation of rapid serum agglutination and haemagglutination inhibition tests for, 198
Myodegeneration in cattle, skeletal muscle biopsy techniques in animals for histochemical and ultrastructural examination and especially for the diagnosis of, 434

Nematode infections in lambs and calves, low level feed administration of morantel tartrate in the prophylaxis of experimental, 166
Nigeria:
field trail in, with the comparitive intradermal allergic test for the diagnosis of contagious bovine pleuropneumonia, 162
orungo virus of the orbivirus taxon. Experimental sheep infection and neutralizing antibodies in domestic and wild animals in, 108
seasonal changes in bovine and caprine blood chemistry and hepatic vitamin A in savanna zone of, 493
seasonal variations in spermatogenesis in bulls indigenous to, 537
Nitrogen utilization by ruminants, some effects of coating urea prills with sulphur and wax on, 578

Oestradiol-17β, lutropin, testosterone, progesterone and 17-hydroxyprogesterone peripheral plasma concentrations; hyena disease in cattle, 462
Oestrus, effects on subsequent live-weight gains and onset of; energy under-nutrition in the weanling filly foal I, 205
Orungo virus of the orbivirus taxon. Experimental sheep infection and neutralizing antibodies in domestic and wild animals in Nigeria, 108
Ossification, an assessment of, and radiological interpretation in limbs of growing horses, 366
Ostertagiasis in calves in Britain, some observations on the epidemiology of; an analysis of laboratory diagnostic and field data for 1974 to 1976, 541

Panama, national and international foot and mouth disease control programmes in, 10
Pasteurella multocida, carrier rate of, in a cattle herd associated with an outbreak of haemorrhagic septicaemia in the Sudan, 375
Plasma potassium and sodium appetite; the effect of potassium infusion in sheep, 217
Pigs:
atrophic rhinitis: the value of radiography for diagnosis in piglets, 193
critical analysis of condemnation data for cattle, sheep and, 1969 to 1975, 476
effect of mouldy feed containing zearalenone on pregnant sows, 421
experimentally induced bacterial endotoxaemia and abortion in, 225
replication of African swine fever virus in endothelial cells, 280
Poisoning, a review of recent trends in animal, 128
Potassium infusion in sheep, effect of, on plasma potassium and sodium appetite, 217
Poultry, review of biotin deficiency and the fatty liver and kidney syndrome in, 598
Progestagens in mares' milk, 214
Progesterone, 17-hydroxyprogesterone, lutropin, oestradiol-17β and testosterone peripheral plasma concentrations; hyena disease in cattle, 462
Pseudopregnancy in mares, some observations on, 263
Pullets, experimental infection of point-of-lay and in-lay, with *Salmonella typhimurium*, 92

Rabbits, feeding dried rabbit faeces to growing, 393
Residue monitoring of food products of animal origin, 243
Ruminants, some effects of coating urea prills with sulphur and wax on nitrogen utilization by, 578

Salmonellae in effluent waters and river sites in North Yorkshire, 350
Salmonella dublin, chronic infection in calves, 113
Salmonella typhimurium, experimental infection of point-of-lay and in-lay pullets with, 92
Serum immune globulins, the relationship between the zinc sulphate turbidity test and the susceptibility of calves to diarrhoea, 231
Sheep:
congenital disease of lambs clinically similar to 'inherited cerebellar cortical atrophy' (daft lamb disease), 299
critical analysis of condemnation data for cattle, pigs and, 1969 to 1975, 476
factors affecting blood clotting in immature cattle and, 286
growth rates and patterns of organs and tissues in the ovine foetus, 181
interrelationship of *Lymnaea truncatula* and ovine fascioliasis in the Ethiopian Central Highlands, 551
low level feed administration of morantel tartrate in the prophylaxis of experimental nematode infections in calves and lambs, 166
orungo virus of the orbivirus taxon, Experimental infection and neutralizing antibodies in domestic and wild animals, 108
plasma potassium and sodium appetite; the effect of potassium infusion in, 217
tumours in North East Yorkshire I, prevalence on seven moorland farms, 454
Sodium appetite and plasma potassium; the effect of potassium infusion in sheep, 217
Spermatogenesis in bulls indigenous to Nigeria, seasonal variations in, 537
Staphylococcus epidermidis, the effect of subclinical infection of the lactating bovine udder on its susceptibility to infection with *Streptococcus agalactiae* or *Escherichia coli*, 146
Staphylococcal mastitis, the problem of immunization against, 412
Streptococcus agalactiae, a comparison between four serological methods used in the identification of, 572
Streptococcus agalactiae, effect of subclinical *Staphylococcus epidermidis* infection of the lactating bovine udder on its susceptibility to infection with *Escherichia coli* or, 146
Sudan, carrier rate of *Pasteurella multocida* in a cattle herd associated with an outbreak of haemorrhagic septicaemia in the, 375
Suxamethonium in the dog, observations on the duration of action of, 521

Theobromine, pharmacology and pharmacokinetics of: the use of cocoa-bean meal in the diets of horses, 171
Tumours, sheep, in North East Yorkshire I, prevalence on seven moorland farms, 454
Turkeys, an evaluation of rapid serum agglutination and haemagglutination inhibition tests for mycoplasmosis in, 198

Urea prills, some effects of coating with sulphur and wax on nitrogen utilization by ruminants, 578

Vaccines, factors affecting the quality of foot and mouth disease, 68
Vaccine strains, the selection of foot and mouth disease virus, 63
Viral disease of farm animals, a preliminary survey of British deer for antibody to some, 85

Waterfowl, botulism and mud, 407

Zearalenone, effect of mouldy feed containing, on pregnant sows, 421
Zinc sulphate turbidity test, the relationship between, serum immune globulins and the susceptibility of calves to diarrhoea, 231